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### REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed December 7, 2005. Reconsideration and allowance of the application and pending claims 1-10 and 16-20 are respectfully requested.

#### **I. Claim Rejections - 35 U.S.C. § 103(a)**

##### **A. Statement of Rejections**

Claims 1, 16, 18 and 19 have been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over *Coffin et al.* ("*Coffin*," U.S. Pub. No. 2002/0079117) in view of *Kutlu* ("*Kutlu*," U.S. Pat. No. 6,472,762). Claims 2, 8 and 17 have been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over *Coffin* in view of *Kutlu* and in view of *Baba* ("*Baba*," U.S. Pat. No. 6,313,521). Claims 3 and 10 have been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over *Coffin* in view of *Kutlu* and in view of *McCutcheon* ("*McCutcheon*," U.S. Pat. No. 5,958,556). Claim 5 has been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over *Coffin* in view of *Kutlu* and in view of *Toy et al.* ("*Toy*," U.S. Pat. No. 6,333,460). Claims 4, 6 and 7 have been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over *Coffin* in view of *Kutlu* and in view of *Gungor et al.* ("*Gungor*," U.S. Pat. No. 5,944,097). Claims 9 and 20 have been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over *Coffin* in view of *Kutlu* and in view of *Alcoe et al.* ("*Alcoe*," U.S. Pub. No. 2002/0135063). Applicant respectfully traverses these rejections.

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### B. Discussion of the Rejection

As has been acknowledged by the Court of Appeals for the Federal Circuit, the U.S. Patent and Trademark Office ("USPTO") has the burden under section 103 to establish a *prima facie* case of obviousness by showing some objective teaching in the prior art or generally available knowledge of one of ordinary skill in the art that would lead that individual to the claimed invention. See In re Fine, 837 F.2d 1071, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). The Manual of Patent Examining Procedure (MPEP) section 2143 discusses the requirements of a *prima facie* case for obviousness. That section provides as follows:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teaching. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and reasonable expectation of success must be found in the prior art, and not based on applicant's disclosure.

In the present case, it is respectfully submitted that a *prima facie* case for obviousness has not been established. In particular, the arguments presented in the Office Action to support a finding of obviousness are inadequate as a matter of law to provide the required suggestion or motivation to combine selective teachings from multiple prior art references. Applicant notes the following assertions from the Office Action:

*Kuulu* discloses a substrate reinforcement member 116, Fig. 4 attached to the upper surface of the substrate 106 and separated from the lid 104. At time the invention was made, it was well known to use a substrate reinforcement member attached to the upper surface of the substrate and separated from the lid.

Therefore it would have been obvious to one of ordinary skill in the art, at time the invention was made, for *Coffin* to include in his invention

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that a substrate reinforcement member attached to the upper surface of the substrate and separated from the lid.

Benefit of separating a substrate reinforcement member from the lid is eliminate of necessity to match the coefficient of thermal expansion (CTE).

*Kutlu* discloses a substrate reinforcement member 116, Fig. 4 attached to a surface of the substrate 106 and being adapted to reduce mechanical stress in the substrate (column 2, lines 8-22). At time the invention was made, it was well know to use a substrate reinforcement member attached to the upper surface of the substrate and being adapted to reduce mechanical stress in the substrate.

Therefore it would have been obvious to one of ordinary skill in the art, at time the invention was made, for *Coffin* to include in his invention that a substrate reinforcement member attached to the upper surface of the substrate and being adapted to reduce mechanical stress in the substrate.

Benefit of doing so is to reduce mechanical stress in the substrate.

*Kutlu* discloses the lid 104 is adapted to move downwardly to accommodate bending of the substrate 106. [This is possible because the substrate reinforcement member attached to the surface of the substrate separated from the lid, Fig. 4]. At time the invention was made, it was well know to use the lid is adapted to move downwardly to accommodate bending of the substrate.

Therefore it would have been obvious to one of ordinary skill in the art, at time the invention was made, for *Coffin* to include in his invention the lids is adapted to move downwardly to accommodate bending of the substrate.

Benefit of separating a substrate reinforcement member from the lid is eliminate of necessity to match the coefficient of thermal expansion (CTE).

*Kutlu* discloses the substrate reinforcement member 116 extends around a periphery of the die 102, Fig. 4. At time the invention was made it was well know to use the substrate reinforcement member extends around a periphery of the die.

Therefore it would have been obvious to one of ordinary skill in the art, at time the invention was made, for *Coffin* to include in his invention that the substrate reinforcement member extends around a periphery of the die to provide stiffness.

*Baba* discloses in Fig. 3 the substrate reinforcement member comprises a ring 10. Therefore, at time the invention was made, it was well know to use the substrate reinforcement member comprises a ring.

Therefore it would have been obvious to one of ordinary skill in the art, at time the invention was made, for *Coffin* to include in his invention the substrate reinforcement member comprises a ring to provide stiffness.

*Baba* discloses in Fig. 3 the substrate reinforcement member is parallel and adjacent to sides of the lid. Therefore, at time the invention was made, it was well know to use the substrate reinforcement member is parallel and adjacent to sides of the lid.

Therefore it would have been obvious to one of ordinary skill in the art, at time the invention was made, for *Coffin* to include in his invention the

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substrate reinforcement member is parallel and adjacent to sides of the lid to provide stiffness.

*Baba* discloses in Fig. 3 the substrate reinforcement member has a rectangular cross section. Therefore, at time the invention was made, it was well know to use the substrate reinforcement member has a rectangular cross section.

Therefore it would have been obvious to one of ordinary skill in the art, at time the invention was made, for *Coffin* to include in his invention the substrate reinforcement member has a rectangular cross section to provide stiffness.

*McCutcheon* discloses in Fig. 1 the substrate 8 reinforcement member comprises at least one longitudinal bar 2. Therefor, at time the invention was made, it was well know to use the substrate reinforcement member comprises at least one longitudinal bar.

Therefore it would have been obvious to one of ordinary skill in the art, at time the invention was made, for *Coffin* to include in his invention the substrate reinforcement member comprises at least one longitudinal bar to provide stiffness.

*McCutcheon* discloses in Fig. 1 the substrate reinforcement member has an elongated bar shape 2. Therefore, at time the invention was made, it was well know to use the substrate reinforcement member has an elongated bar shape.

Therefore it would have been obvious to one of ordinary skill in the art, at time the invention was made, for *Coffin* to include in his invention the substrate reinforcement member has an elongated bar shape to provide stiffness.

*Toy* discloses also discloses in the "Background of the invention" section, at the time the invention was made, it was well know to use the lid comprises one of AlSiC-9, CuW, and SiC (column 2, lines 5-11).

Therefore it would have been obvious to one of ordinary skill in the art, at time the invention was made, for *Coffin* to include in his invention the lid comprises one of AlSiC-9, CuW, and SiC to provide better matching of the coefficient of thermal expansion (CTE) chip and lid.

*Gungor* discloses in Fig. 2 the substrate 16 reinforcement member 10 comprises one of Invar and SiC. Therefore, at time the invention was made, it was well know to use the substrate reinforcement member comprises one of Invar and SiC.

Therefore it would have been obvious to one of ordinary skill in the art, at time the invention was made, for *Coffin* to include in his invention the substrate reinforcement member comprises one of Invar and SiC, to provide stiffness.

*Alcoe* discloses in Fig. 4 the substrate 10 reinforcement member comprises four separate bars 20. Therefore, at time the invention was made, it was well know to use the substrate reinforcement member comprises four separate bars.

Therefore it would have been obvious to one of ordinary skill in the art, at time the invention was made, for *Coffin* to include in his invention the substrate reinforcement member comprises four separate bars to provide stiffness.

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*Alcoe* discloses in Fig. 4 the substrate 10 reinforcement member comprises two separate members 20. Therefore, at time the invention was made, it was well known to use the substrate reinforcement member comprises two separate members.

Therefore it would have been obvious to one of ordinary skill in the art, at time the invention was made, for *Coffin* to include in his invention the substrate reinforcement member comprises two separate members to provide stiffness.

As indicated above, Applicant respectfully asserts that such reasoning is inadequate as a matter of law to provide the required suggestion or motivation to combine selective teachings from multiple prior art references, as required for a *prima facie* case for obviousness. Applicant believes the below cited case law is helpful in providing further guidance on this point. "When the patented invention is made by combining known components to achieve a new system, the prior art must provide a suggestion or motivation to make such a combination." Heidelberger Druckmaschinen v. Hantscho Commercial Products, Inc., 21 F.3d 1068, 1072, 30 U.S.P.Q.2d 1377 (Fed. Cir. 1994). "Virtually every invention is a combination of elements or process steps, and synergism, or its equivalent 'new and different result,' is not *required* for patentability." Connell v. Sears, Roebuck & Co., 722 F.2d 1542, 1549, 220 U.S.P.Q. 193 (Fed. Cir. 1983). "Humans must work with old elements, most if not all of which will normally be found somewhere in an 'examination of the prior art.'" Connell v. Sears, Roebuck & Co., 722 F.2d 1542, 1549, 220 U.S.P.Q. 193 (Fed. Cir. 1983). In view of the above citations of case law, it is clear that finding a missing feature in a secondary reference, even if known, does not provide the necessary motivation or suggestion to combine the secondary reference with the primary reference. Furthermore, the teaching, motivation, or suggestion to combine must be present within the cited references. In re Fine, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988). Accordingly, Applicant respectfully submits that no such suggestion

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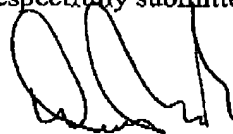
or motivation to combine the art cited in the Office Action is present, and thus respectfully requests that the rejections to claims 1-10 and 16-20 be withdrawn.

In summary, it is Applicant's position that a *prima facie* for obviousness has not been made against Applicant's claims. Therefore, it is respectfully submitted that each of these claims is patentable over the art of record and that the rejection of these claims should be withdrawn.

### CONCLUSION

Applicant respectfully submits that Applicant's pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,



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